

**REMARKS/ARGUMENTS**

This Amendment is in response to the Office Action dated November 17, 2004. Claims 1-23 are pending. Claims 1-23 are rejected. Claims 1, 5-6, 15, 17-18, and 22 have been amended. Claims 2-4, 8-14, 16, and 19-21 have been canceled. Accordingly, claims 1, 5-7, 15, 17-18, and 22-23 remain pending in the present application.

The drawings are objected to under 37 CFR 1.83(a). The Examiner states, "The drawings must show every feature of the invention specified in the claims. Therefore, the first pair of conductors (*two conductor*) which has the height to be substantially shorter than the height of the second pair of conductors (*two conductors*), as recited in claims 2-3, 8-9 and 19-20 must be shown or the feature(s) canceled from the claim(s)..."

Claims 2-3, 8-9, and 19-20 have been canceled. The Examiner objection is thus moot.

Claims 1, 2, 4-8, 10-19 and 21-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Arima et al (6,479,758). Claims 2, 4, 8, 10-14, 16, 19, and 21 have been canceled. Their rejection is thus moot.

Per the remaining claims, Applicant respectfully disagrees with the Examiner as to the claims as amended. In accordance with the present invention, a layer of a carrier or the chip package comprises a plurality of pairs of conductors, where each pair of conductors in the layer is positioned so that adjacent pairs of conductors affect each other evenly, where cross-talk between adjacent pairs of conductors is substantially minimized without increasing a size of the package.

The Examiner points to conductor pairs labeled "X" and "Y" in the Office Action as being positioned to be orthogonal and equidistant to each other. However, unlike the present invention, not *each* pair of conductors in the layer disclosed in Arima is so positioned. Rather, the positions of the conductors in Arima is more analogous to the prior art positioning set forth in Figures 2A and 2B of the specification, where some adjacent pairs affect each other unevenly.

Thus, Arima does not teach or suggest the plurality of pairs of conductors where each pair of conductors in the layer is positioned so that adjacent pairs of conductors affect each other evenly, as recited in amended independent claims 1, 15, and 18.

Claims 1, 4-5, 11, 13, 15-16, 18 and 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Stearns et al (6,215,184). Claims 4, 11, 13, 16, and 21 have been canceled. Their rejection is thus moot.

Per the remaining claims, Applicant respectfully disagrees with the Examiner as to the claims as amended. The Examiner points to conductor pairs labeled “X” and “Y” in the Office Action in Fig. 4 of Stearns as being orthogonal to each other. However, unlike the present invention, not *each* pair of conductors in the layer disclosed in Stearns is so positioned. For example, the conductor pair (11) in Fig. 4 of Stearns is not orthogonal or equidistant from its adjacent pairs of conductors X and Y. Conductor pair (11) would thus affect pairs X and Y unevenly.

Thus, Stearns does not teach or suggest the plurality of pairs of conductors where each pair of conductors in the layer is positioned so that adjacent pairs of conductors affect each other evenly, as recited in amended independent claims 1, 15, and 18.

Claims 1-3, 7-11, 14-16, 18-21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (6,657,310). The Examiner relies upon the structure of the heights of pairs of conductors in Lin as teaching the invention. The limitations in the claims pertaining to this structure have been canceled. The Examiner’s rejection is thus moot as to the claims as amended.

Therefore, for the above identified reasons, the present invention as recited in amended independent claims 1, 15, and 18 is neither taught nor suggested by the cited references.

Applicant further submits that claims 4-7, 17, and 22-23 are also allowable because they depend

on the above allowable base claims.

In view of the foregoing, Applicant submits that claims 1, 5-7, 15, 17-18, and 22-23 are patentable over the cited references. Applicant, therefore, respectfully requests reconsideration and allowance of the claims as now presented.

Applicants' attorney believes this application in condition for allowance. Should any unresolved issues remain, Examiner is invited to call Applicants' attorney at the telephone number indicated below.

Respectfully submitted,  
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